

**HEIGHT MODERNIZATION COORDINATION MEETING  
DRAFT - Meeting Notes –Thursday, May 14, 2009**

**In attendance:**

- Call-ins from: AL (John Russell), ID (Rayce Ruiz), IL (Amy Eller), KS (Ingrid Langraf), KY (Wolfgang Ziegler), LA (Roy Dokka), OR (Ken Bays), PA (Chuck Harpster), SC (Matt Wellslager), TX (Greg Hauger, Dan Prouty), WA (Dave Steele), WI (Paul Hartzheim, Dave Moyer)
  
- Silver Spring: CO-OPS (Tom Landon), NGS( Doug Brown, Lucy Hall, Tim Hanson, Eric Linzey, Gilbert Mitchell, Dan Roman, Renee Shields, Sonita Tiwari, Vicki Veilleux, Maralyn Vorhauer, Erika Wilson)
  
- Advisors/Coordinators: Jim Harrington (AL), Marti Ikehara (CA), Pam Fromhertz (CO), Chris Pearson (IL), Monroe Rivers (KS), Ross MacKay (KY), Denis Riordan (LA), Dave Rigney (MI), Dave Zenk (MN), Jim Richardson (NE), Scott Lokken (NC), Warren Payton (NJ), Cliff Middleton (TX), John Ellingson (WI)

**Budget and Grant**

**Renee Shields**

- As previously announced, NGS has no FY2009 funding for competitive Height Modernization grants, but has four earmarks. Sonita is working with the grantees receiving funding via earmarks to complete the necessary paperwork for their grants.
- Dave Zenk expressed concerns about the cost associated with the preparation of the grant applications only to find that NGS has no funding for the grants. He asked if there was some assurance that NGS could give to applicants that funding is available before they go thru the added cost of preparing a grant proposal.
- Renee stated that all Federal Funding Opportunities are pending availability of funds. The fact that some states received earmarks should be noted.
- NGS is currently preparing Federal Funding Opportunity (FFO) notices for FY2010 and hopes that applicants for FY2009 grants will be able to use their existing proposals with some modification to apply for FY2010 funding.
- Sonita is compiling information/guidelines to be published on the web to answer questions about the grant process.

**Models and Tools**

• **Status of LOCUS**

**Renee Shields**

Trying to push LOCUS (Leveling Online Computing Service) to be online and operational this year. They are waiting to turn on the user interface before it officially launched.

• **THM Digital Leveling Tool**

**Dan Prouty**

Still working thru some glitches with the software when processing Leica digital leveling. Mr. Smith, the programmer should be working on the Topcon within the next month.

• **GRAV-D**

**Renee Shields**

Vicki Childers, the project manager for GRAV-D, is collecting airborne gravity data along the Texas coastline. They had some delays, but she expects they will have the Texas coast finished by mid June.

Ross MacKay inquired about the status of the processing software and the data base management for the data. Dan Roman reported that Theresa Diehl is trying to figure out how to streamline the processing software. She is trying to document the procedures so others can do it. The GRAV-D team will also have to develop a mechanism for archiving, storage and manipulation of the data. Then they will have to decide how to clean the database by taking the existing terrestrial data and integrating it with the satellite and the airborne data to create a seamless dataset.

- **GEOID** **Dan Roman**  
Dan is still having problems with the database extraction. Every time he pulls the data from the database the set of stations he pulls out is not consisted. He is actually losing stations instead of adding the stations in critical places. He is trying to track down the cause of the problem.
- **FEMA Flood Certificates** **Roy Dokka**  
The Louisiana Spatial Reference Center and NGS are working with FEMA to develop guidelines to help surveyors in the creation of flood certificates with the use of GPS. The guidelines will be developed using existing NGS' guidelines, draft guidelines being created for real time, and best practices using static, single station real time, or real time network procedures. Guidelines will emphasize various levels of details required or recommended, such as what attributes are needed in a real-time network, the importance of site calibrations against known vertical geodetic control for any real time applications, and the importance of validating published control to insure it is up to date. This effort will improve the collaboration between NGS and FEMA. This information will be included in a series of FEMA published guidelines for the NFIP (National Flood Insurance Program). The new guidelines should be published in six months to a year.

#### **Outreach, Education, Capacity Building**

**Erika Wilson**

- **Introduction to CORS – May 19, 2009.**
- **CORS for Advanced Users – May 20, 2009.**
- **PAGES and ADJUST – June 8-9, 2009.**
- **Designing and Delivering a Training Course – July 27-31, 2009**

For more information or to request the scheduling of a class to meet your training needs, contact [NOS.NGS.Corbin.Training.Center@noaa.gov](mailto:NOS.NGS.Corbin.Training.Center@noaa.gov) or email [Erika.Wilson@noaa.gov](mailto:Erika.Wilson@noaa.gov).

#### **Events – meetings and workshops**

- **NGS Presents Brown Bag: HTDP 3.0 – An Updated Model of Deformation in the Western U.S. by Chris Pearson – May 21, 2009.**
- **NGS' Height Modernization Program - June 5, 2009 in Oklahoma City, OK.** Agenda is available online: <http://www.ngs.noaa.gov/INFO/conferences.shtml>
- **Height Modernization Along the South-Central Gulf Coast - June 8-9, 2009 in Beaumont, TX.** Agenda is available online: <http://www.ngs.noaa.gov/INFO/conferences.shtml>

- **Height Modernization along the South-Central Gulf Coast - June 11-12, 2009 in Monroe, LA.** Agenda is available online: <http://www.ngs.noaa.gov/INFO/conferences.shtml>
- **NGS Presents Brown Bag: NOAA Regional Collaboration by Pam Fromhertz – June 15, 2009.**
- **Real-Time Network Fundamentals – June 26, 2009 in Valentine, NE.** Agenda is available online: <http://www.ngs.noaa.gov/INFO/conferences.shtml>
- **ESRI Survey and Engineering GIS Summit - July 11-14, 2009 in San Diego, CA.** Agenda is available online: <http://www.esri.com/events/uc/agenda/agendaatglance.html>

#### **CO-OPS**

**Tom Landon**

- Annual station inspections and leveling are now being performed in Alaska, Washington, California, Florida, and the Chesapeake Bay.
- An elevated platform was installed at tidal station Freshwater Bayou Locks, Louisiana. This station is now considered hurricane hardened.
- Working with DNR (Division of Nearshore Research) and Texas A&M University for engineering design support to install two sentinel stations at Galveston Channel and Saline River. These will probably be installed during the first and second quarter of FY2010.
- Working with Les Graham from the Mississippi Spatial Reference Center on the antenna mounting for a CORS site on the sentinel storm tide station at Bay Waveland. Once the details are worked out, they will work with Roy Dokka and Denis Riordan to put CORS sites on some of the sentinel stations in Louisiana.
- Field crews in the Great Lakes are using WinDesc and Translev leveling programs for the first time.
- Reconstruction work is needed at Saline Pass, Galveston Pleasure Pier and Galveston Pier 21, Texas. The tidal station at Point Isabel, Texas will be relocated. The tidal station at Rock Port, Texas may be upgraded to sentinel storm tide station.

#### **SRSD**

**Doug Brown**

- On June 10, Gary Jeffries will be a part of a five-person panel in Washington, DC as part of Capitol Hill Ocean Week. The panel will be discussing before Congressional staffers and possibly members of Congress the contribution NOAA's navigational services add to the value of our economy.

#### **SRSD**

**Joe Evjen**

- Successfully installed a CORS adjacent to the tide gauge in New York City at Battery Park on the south end of Manhattan Island. Will work with CO-OPS to have the site connected to the tide gauge by leveling observations.

#### **OAD**

**Tim Hanson**

- Continuing to beta test WinDesc and Translev leveling programs, this has been a great help in improving their processing speed. OAD still has great number of leveling projects to process.

#### **Updates from States**

- **Illinois** **Chris Pearson**  
 Met to select a contractor for their leveling program and they should have a contractor in place by July. They are designing their own brass disks to be used for all the Height Modernization caps in Illinois. ISGS hopes to have a presentation at the Illinois State Fair for Height Modernization.
- **Texas - Corpus Christi** **Dan Prouty**  
 Texas Spatial Reference Center will install six CORS for the Army Corps of Engineers. They will be installed on the two sentinel tide stations, one installation offshore on platform own by the USACE, and two other tidal stations south of Galveston. These will be Texas Coastal Ocean Observations Network (TCOON) stations.
- **Texas – Harris Galveston** **Cliff Middleton**  
 Cliff will finish the adjustment of 2008 Harris-Galveston Coastal Subsidence District (HGCSO) data so the new heights can be published for the Harris-Galveston area. He heard about a large LiDAR project on the north slope of Alaska being done by the USGS. The project would include shoreline mapping and bathymetry. Since this is such a massive project he thinks NGS should have some involvement especially from a height modernization perspective. Ingrid Langraf suggested Renee contact Craig Seaver, the USGS Geospatial liaison in Alaska and Pam Fromhertz recommended she contact Mike Aslaksen.
- **South Carolina** **Matt Wellslager**  
 South Carolina Geodetic Survey just finished a height modernization project of 255 stations in Horry County. Roy Anderson is surveying a subset of these stations for a comparison of the VRS determined heights against height modernization heights to see if they can achieve 2 cm height modernization elevations using height modernization techniques on a far shorter observation time span in the county. He has been working now for a couple of weeks and things seem to be going well. In addition, they are getting ready to do mark setting for another three-county project. Once completed, a quarter of the state regionally will be completely finished with height modernization. They hope to get the observations started by mid June and the project should take a month to six weeks to complete.
- **Nebraska** **Jim Richardson**  
 The Nebraska Surveyors Society will meet with some of their congressmen to try to get height modernization funding, irrespective of the rest of the procedures which have been done in the past with height modernization forum.
- **Idaho** **Rayce Ruiz**  
 Idaho Transportation Department purchased the last set of CORS equipment they needed to get their real-time network up and running. The site will be near the Idaho National Laboratory and will be submitted for inclusion in the National CORS.

**Other Business**

Next meeting will be held Thursday, June 11, 2009 at 2:00 Eastern Standard Time.